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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,610	11/21/2003	Gi Hyeong Do	9988.071.00-US	8195
30827	7590	05/10/2006	EXAMINER	
MCKENNA LONG & ALDRIDGE LLP 1900 K STREET, NW WASHINGTON, DC 20006			GRAVINI, STEPHEN MICHAEL	
			ART UNIT	PAPER NUMBER
			3749	
DATE MAILED: 05/10/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Interview Summary</b>	<b>Application No.</b> 10/717,610	<b>Applicant(s)</b> DO, GI HYEONG	
	<b>Examiner</b> Stephen Gravini	<b>Art Unit</b> 3749	

All participants (applicant, applicant's representative, PTO personnel):

(1) Stephen Gravini (PTO pers). (3) \_\_\_\_\_.

(2) Anthony Josephson (appl rep). (4) \_\_\_\_\_.

Date of Interview: 04 May 2006.

Type: a) ☒ Telephonic b) ☐ Video Conference  
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☐ No.  
If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 1-15.

Identification of prior art discussed: of record.

Agreement with respect to the claims f) ☒ was reached. g) ☐ was not reached. h) ☐ N/A.

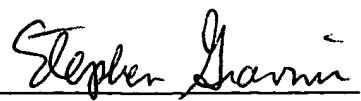
Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Examiner inadvertently attached an earlier action for mailing. A corrected action is attached to this interview summary. It was agreed to request any extensions of time at a later dated and examiner would expedite this correct action by facsimile transmission if necessary.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

SEE ATTACHED DETAILED ACTION

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

  
Examiner's signature, if required

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

#### Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

## **DETAILED ACTION**

### ***Preliminary matter***

Claims 9-14 have been withdrawn in a previous action.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 103***

Claims 1-3 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krüger (US 4,412,389) in view of Wentzlaff (US 5,628,684). Krüger is considered to disclose the claimed invention comprising:

initiating a drying process at column 2 lines 18-24 wherein the disclosed beginning the early phase of a drying process with the drying system is turned on is considered to expressly anticipate the claimed drying procedure initiation because both show the initial beginning of a drying process;

measuring a temperature at column 2 lines 35-45 wherein the disclosed measuring the temperature difference is considered to expressly disclose the claimed temperature measurement because both steps measure temperature;

calculating a temperature variation rate at column 1 lines 50-65 wherein the disclosed calculating time or duration from the determined gradient to expressly anticipate the claimed temperature variation rate calculation because a temperature variation rate and gradient duration calculation are the same patentable steps to those skilled in the art;

calculating a drying time based on the temperature variation rate at column 5 lines 28-57 wherein the disclosed dryer operating time calculation based on a temperature gradient of change in temperature per change in time ( $\Delta\theta/\Delta t$ ) is considered to expressly anticipate the claimed drying time temperature variation rate calculation time because both steps use a change in temperature per change in time which to one skilled in the art defines a temperature variation rate; performing the drying procedure for the calculated drying time at column 5 line 59 through column 6 line 64 wherein the disclosed operating duration is considered to expressly disclose the claimed drying procedure calculated time performance because both steps operate drying based on a time duration calculated from earlier discussed variables. Krüger is also considered to expressly disclose the claimed step of calculating a remaining drying time, wherein drying for the remaining drying time completes the drying procedure at column 6 lines 38-56 and inherently disclose the claimed step of wherein the remaining drying time is based on a known drying pattern, the known drying pattern varying according to an amount and type of laundry at column 3 line 53 through column 4 line 64 because variable amounts and types of laundry will have different remaining drying time basis such that measure temperature/time changes will change remaining drying times. Krüger is considered to disclose the claimed invention except for the claimed steps of calculating a plurality of temperature variation rates and determining whether there is a substantial increase in the temperature variation rate as a function of the plurality of temperature variation rates. Wentzlaff, another dryer control method, is considered to disclose steps of calculating a plurality of

temperature variation rates and determining whether there is a substantial increase in the temperature variation rate as a function of the plurality of temperature variation rates at column 8 lines 1-59 because the disclosed start temperature values at minute intervals and system response represent a variation rate calculation since both measure a value and provide a response function and because the disclosed considerable higher heating determines a substantial temperature increase in variation rate as a function of a plurality of temperature variation rates since both an iterative process to determine a laundry dryer control method. It would have been obvious to one skilled in the art to combine the teachings of Krüger with the steps of calculating a plurality of temperature variation rates and determining whether there is a substantial increase in the temperature variation rate as a function of the plurality of temperature variation rates, considered disclosed in Wentzlaff for the purpose of applying a variable process such that an averaged measured value of air temperature during a quasi-steady-state phase to keep approximate equilibrium of heat removal from laundry by recorded and stored memory so that in making a decision as to which of the memorized process courses should be considered for the further handling of the load of laundry and a relevant decision data until the quasi-steady-state phase is reached.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krüger in view of Wentzlaff in further view of Hyldon (US 3,792,956). Krüger in view of Wentzlaff is considered to obviate the claimed invention, as rejected above, except for the claimed one degree Celsius rate excess. Hyldon, another dryer control method, is considered to disclose a one degree Celsius rate excess at column 5 lines 24-42. It

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would have been obvious to one skilled in the art to combine the teachings of Krüger in view of Wentzlaff with the one degree Celsius rate excess, considered disclosed in Hyldon for the purpose of controlling temperature for better drying process rates affecting the desired output.

### ***Double Patenting***

Claims 1-8 and 15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,775,923. Although the conflicting claims are not identical, they are not patentably distinct from each other because the present claims reciting "calculating a temperature variation rate" is considered a broader recitation of the patented step "determining a medium temperature time by measuring a time lapse from said drying procedure initiating step to a point where the internal temperature reaches a medium temperature between a drying initiation temperature and a maximum drying temperature; setting a drying time based on the determined medium temperature time and performing the drying procedure for the set drying time."

It must be noted that assignee to the present application has a reasonable potential for an extreme number of double patenting rejections for the application. For example, assignee has more than 3000 published applications, excluding patented inventions. Of those applications two more applications could reasonably be used in further double patenting rejections. Those applications include claims 3-9 of 10/912,039 and claims 1-17 of 10/994,415. It is requested that applicants share the prosecution burden and identify claims which may be potentially subject to double patenting

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rejections and amend the claims of the present application and/or file a terminal disclaimer as appropriate.

***Response to Arguments***

Applicant's arguments filed March 13, 2006 have been fully considered but are considered moot based on the new grounds of rejection.

***Conclusion***

Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Gravini whose telephone number is 571 272 4875. The examiner can normally be reached on normal weekday business hours (east coast time).



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg can be reached on 571 272 4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SMG

May 5, 2006